DOCUMENT RESUME

ED 297 847 PS 017 452

AUTHOR Jarvis, Carolyn; And Others
TITLE Shaping the Future: Teaching Our Youngest Students. Research Brief #2.
INSTITUTION New York City Board of Education, Brooklyn. Office of Educational Assessment.
PUB DATE Jun 88
NOTE 9p.
PUB TYPE Viewpoints (120) -- Collected Works - Serials (022)
JOURNAL CIT Research Brief: An O.E.A. Bulletin Linking Research with Educational Practice; n2 Jun 1988

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Bilingual Education; Class Size; *Early Childhood Education; Educational Planning; *Educational Policy; Educational Trends; *Elementary School Curriculum; *Inservice Teacher Education; Parent Participation; *Program Implementation
IDENTIFIERS *New York (New York)

ABSTRACT

New York City has implemented all-day kindergarten programs, reduced the size of primary grade classes, and proposed that the public schools provide pre-kindergarten programs for 4-year-olds by 1989. In the process of program implementation, much has been learned about large-scale efforts aimed at young children. It is known that simply realigning resources does not guarantee positive results. In the future, as new programs are implemented, several questions must be answered: (1) How can a school system best marshall its resources to strengthen early childhood education? (2) What kinds of efforts are likely to pay off? (3) Which programs deserve support? (4) Which strategies are unlikely to succeed? and (5) Which strategies are counterproductive? By drawing upon the Office of Educational Assessment's evaluations of recent early childhood initiatives, this research brief addresses the questions and reviews nationwide research. Particular attention is paid to curriculum and professional development. Findings that are relevant to policy formation are highlighted and strategies for planning early childhood initiatives are suggested. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED297847

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RESEARCH BRIEF #2
An O.E.A. Bulletin Linking Research with Educational Practice

Shaping The Future: Teaching Our Youngest Students

This year, the Class of 2000 entered kindergartens across the nation, bringing home to Americans the vital role played by public schools in shaping the future. Today, there is growing consensus among researchers, educators, public officials, and parents, that the early childhood years are critical to later academic success. Teachers have long held this conviction; now, major studies substantiate their view.

In recent years, New York City has placed great stress on early childhood programs, putting all-day kindergartens in place throughout the city, and reducing class size in grades 1, 2, and 3. New York City is also among the first cities in the nation to make a full-scale commitment to pre-kindergarten education, proposing that the public school system offer a place in a pre-K program to every four-year-old New Yorker by 1989.

In building these programs, we have learned a great deal about large-scale efforts aimed at our youngest students. Most importantly, we know that simply realigning resources does not guarantee positive results. As we implement new programs, we must ask: How can a school system best marshall its resources to strengthen early childhood education? What kinds of efforts are likely to pay off? Which programs deserve support? Which strategies are unlikely to succeed? Which are counterproductive?

Research Brief #2 addresses these questions. It draws upon O.E.A.'s evaluations of recent early childhood initiatives, and reviews nationwide research, paying particular attention to curriculum and professional development. It highlights findings that are relevant to policy formulation, and suggests strategies for planning early childhood initiatives.

Investing in Tomorrow

Nationwide research shows that investments in early childhood education — pre-K through grade 3 — pay substantial dividends. The Consortium for Developmental Studies (1983) found that high-quality early childhood programs can have a positive, long-term effect on academic performance and social-emotional behavior, and can strengthen children's chances for future success.

More recently, a study of the Chicago public schools by the Chicago Panel on Public School Policy and Finance (1987) reported that strong preparation in the elementary grades is the most important predictor of later achievement. That study noted that students from poverty areas who attended schools where reading achievement was strong tended to perform well throughout their school careers, and stayed in school longer than students from similar neighborhoods whose early foundations were less solid.

New York City's experience bears out these findings. Student achievement data suggest that children are profiting from our early childhood programs. We can point, in particular, to impressive performances by last year's third graders, the first group of students to have benefited from the full range of our early childhood initiatives: all-day kindergarten and reduced class size in grades 1, 2, and 3. Compared to the previous year's third graders, this group registered notable increases in the percentage of students scoring at or above grade level in both reading (a 4.0 percentage point gain) and mathematics (a 4.3 percentage point gain). On the State mathematics test, the percentage of third-graders scoring

PS 017452

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Jane Canner/N.Y.C. Bd. of Educ.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

above the State's minimum standard jumped a dramatic 8.6 percentage points.

Policy and Planning

While national and local experience confirm the importance of the early childhood years, research data do not tell decision makers which policies will be most effective in promoting and sustaining achievement. The literature does point, however, to the need for careful planning, coordination, and supervision.

O.E.A. evaluations of New York City's early childhood programs underscore the importance of front-end planning. Without careful, detailed advance planning, which may unavoidably result in delayed program implementation, large-scale early childhood efforts are inevitably flawed.

New York City's public schools enroll nearly a million children, and citywide initiatives create daunting logistical problems. To double the length of the kindergarten day systemwide, the Board of Education had to double the number of kindergarten classrooms and teachers. In effect, we had to accommodate an additional 30,000 children — the equivalent of the entire Rochester, New York school system — not only with classrooms and teachers, but also with furniture, equipment, learning materials, and meals (O.E.A. 1986a).

Introducing a major new program often creates a ripple effect. Reducing class size means locating and then equipping new classrooms. It also means hiring new teachers, and enough staff development specialists and supervisors to work with them. It means creating a curriculum that exploits opportunities for small-group and individual instruction, orienting staff to its implementation, and developing or acquiring appropriate materials. The hurdles are steep.

When policy-makers ask district and school staff to meet all of these challenges at once, compromise is inevitable. Class size reductions provide a telling example. When New York City capped class size in the early grades, the most drastic cuts were made in first grades at the 99 elementary schools with the lowest reading scores (O.E.A. 1986b). Like all of the city's early childhood initiatives, this policy requires additional teachers — ideally, seasoned professionals. But experienced teachers are hard to come by in the context of today's national teacher shortage. New staff were hired mainly from a pool of recent graduates, and those children with the weakest academic skills found themselves in classrooms presided over by the least experienced teachers.

This paradox dramatizes the policy-maker's dilemma: Should vital programs be postponed or phased in slowly to ensure successful start-up? Or does intense student need justify bold action and large-scale efforts that may founder in their early years, but that ultimately produce more benefit than harm?

Again, research provides no simple answers to these questions. However, the public's demand for immediate educational improvement appears to be a mandate for action. We cannot keep promising

VIEWPOINT FROM THE DIRECTOR OF O.E.A.

Learning from the Private Sector

Our school system is very much in the public eye. New Yorkers from every walk of life are paying attention to what goes on in our classrooms, and are asking educational leaders to act now to turn the system around, using every possible resource at their disposal.

This is a time for action, but action and planning must go hand in hand. We as educators have a great deal to learn from the private sector in this area. CEOs of corporations many times smaller than our school system would not dream of launching a large-scale undertaking — a project of the scope of our citywide early childhood initiatives — without a rigorous plan that anticipates short-term problems and charts a course over the next three to ten years. They would not make the required investments without confidence that the powerful tools of strategic planning and logistics had been fully exploited.

Today, many New Yorkers sense movement in the effort to improve education, to shake up the status quo, and are looking for ways to lend a hand. As we explore areas of cooperation with the academic and business communities, we might well seek assistance from specialists in these highly sophisticated disciplines.

initiatives on hold to ensure that every detail of implementation has been resolved. At the same time, we cannot proceed without thinking through the implications of our policies, or without a rigorous planning process. (See "Learning from the Private Sector.")

Looking at Curriculum

Student achievement data show that New York City's early childhood efforts are beginning to pay off. At the same time, we know that stretching the school day or cutting class size may not be enough to sustain student achievement. We need to ask: What goes on during those additional classroom hours? How does trimming class size affect instructional strategies?

And when we put pre-schoolers into public school classrooms, what should we be doing with them? In the post-Sputnik era, pressure mounted to begin teaching academic skills to younger and younger children. Today, a number of early childhood educators question the wisdom of teaching basic academic skills to three- and four-year-olds. Spodek (1982) finds no evidence that pre-school programs emphasizing academic instruction result in greater long-term gains. Elkind (1986) concludes that academically-oriented programs can actually place some children at educational risk. Although research indicates that a variety of programs promote achievement and cognitive skills, it points to the efficacy of an approach that begins with experiential activities, stressing oral communication, and gradually proceeds to more formal, structured academic work. The timing of the transition depends on the needs of the children; however, researchers do stress continuity. The literature suggests that experiential activities should remain an important element of classroom activities as children master fundamental reading skills. This allows them to synthesize their academic and "real-life" skills, and to experiment with them.

In pre-K and kindergarten classes, New York City has taken a tack that is consistent with national studies. Generally speaking, classes offer children opportunities to develop oral language skills, and give them first-hand experiences that relate directly to their interests and backgrounds, and are appropriate to their age and stage of development (O.E.A. 1986a).

However, we see a sharp decline in both experiential activities and oral-language development after kindergarten (O.E.A. 1986b). This is an alarming trend — particularly in a city where nearly half of the children entering kindergarten do not speak English at home.

This discontinuity is only part of the problem, and O.E.A. evaluations indicate that close attention to curriculum is vital to any early childhood effort (O.E.A. 1986c). In addition to experiential activities and oral-language development, teachers need curricular support in these areas:

1) Combining experiential and academic learning: Using experiential learning to motivate children as they learn to read, and to support an aggressive program of reading instruction.

2) Adapting strategies to smaller classes: Whole-group instruction remains the rule rather than the exception, despite cuts in class size.

TRENDLINES—USA

The Case for Pre-School Programs

For the first time in recent decades, more pre-school children are likely to have a working mother than not. According to the Child Care Action Campaign (1986), 54 percent of children under age six have working mothers. Enrollment rates in pre-school programs have been rising dramatically, regardless of the mother's work status. In 1980, for instance, 41 percent of four-year-olds with non-working mothers were enrolled in a pre-school program (Chorvinsky, 1982).

Research by the Consortium for Developmental Studies shows early childhood programs benefit young students. Participants are:

- **half as likely to be assigned to special education classes**
- **less likely to be retained on grade**
- **more likely to score well on IQ tests**
- **more likely to demonstrate positive attitudes toward school**
- **more likely to give achievement-oriented responses during interviews**

The Consortium concluded that although no single approach meets the needs of all pre-school children, a range of strategies can be effective with different groups of children, if the programs are carefully designed and supervised.

3) Making productive use of class time: O.E.A. evaluators concluded that, generally speaking, too much class time is used for activities not directly related to instruction — including such "management tasks" as lining up, distributing materials, and waiting.

4) Science and social studies: These areas are presently given short shrift in our early childhood classes.

Curriculum development alone is not sufficient. Even when content and methods are clearly spelled out, teachers do not follow them consistently. Clearly, curriculum development goes hand in hand with serious, ongoing staff development efforts.

Language-Minority Children

Nationwide, some 3.4 million children lack sufficient English-language skills to succeed in school programs (Dolson, 1985). These children are at the center of national debate that touches on political and economic as well as pedagogic concerns. Who should receive bilingual services? What kind of services should be offered? At what point? For how long?

Studies on the efficacy of bilingual education in early childhood are inconclusive, but most find that some use of the home language in the classroom eases a young child's transition from home to school. Researchers tend to support Cummins' hypothesis (1981), that instruction in the first language promotes proficiency in the second language as well, provided that there is adequate exposure to the second language and motivation to learn it. Proponents of transitional bilingual education and supporters of the "immersion" approach both recognize the importance of using the home language to facilitate linguistic and cognitive development and support the introduction of the second language at an early age. Researchers have not yet agreed upon the optimal age for introducing second-language instruction.

A growing proportion of New York City's youngest students speak a language other than English at home (O.E.A. 1986d). (See ***Trendlines—NYC.***) The vast majority are Spanish-speaking; the next largest group is Chinese-speaking. O.E.A. studies show that these children need help. Half of the first graders at the 99 lowest performing schools spoke a language other than English at home. Kindergarten children from Spanish-speaking homes did not score as well on a test of school readiness skills as those from other language groups; these children were less likely to have attended pre-K programs than other children.

Like other school systems with large language-minority populations, New York City uses a variety of instructional approaches with these children. Forty percent of language minority kindergartners were assigned to bilingual classes in 1983-84; the rest attended monolingual-English classes. There are signs of progress: the vast majority of children who, on the basis of testing, are considered limited English proficient when they enter the system, pass a basic English proficiency test by grade 2.

Teaching Our Teachers

Researchers agree that staffing is the single most important factor in delivering high-quality early childhood programs; moreover, studies say that professional development has a greater impact on program quality than other staff characteristics (Travers & Ruopp, 1978). Logue, et al. (1986) conclude that without an effective staff development program, teachers may overlook the link between experiential and academic learning that is thought to be critical to early learning.

Some comparative studies of all-day and half-day kindergartens suggest that class size and adult/child ratio are better predictors of academic performance than the length of the school day. In allocating resources, however, decision-makers must take into account the preferences of today's parents, who are more and more likely to work outside of the home, and who tend to be strongly committed to all-day kindergarten.

New York City's experience supports the view that staff development efforts are absolutely essential to early childhood efforts, and that these efforts require concentration and continuity. Our youngest children deserve teachers who demonstrate a high level of motivation and preparation, and who are familiar with major issues of child development.

Today, school systems throughout the nation fall short of this goal. Educators agree that strong preparation is important, but have not reached consensus about how

to ensure that teachers are fully qualified. Three-quarters of the states require no special licensing for early childhood educators (Lamme et al., 1983). National and state organizations concerned with this issue have called for credentials for early childhood teachers, and oppose lowering standards in the face of teacher shortages.

Of course, licensing alone does not guarantee effective teaching. In its report on Project Giant Step, the Mayor's Early Childhood Education Commission (1986) has taken a different approach, recommending training programs that would develop a pool of qualified teachers, and a gradual expansion of programs as qualified teachers become available to staff them.

Teacher training has become a top priority for many school systems which, hampered by teacher shortages, have been forced to hire large numbers of inexperienced teachers. New York City is no exception. The Board of Education has hired thousands of new teachers, or teachers with experience at other grade levels, to staff its all-day kindergartens and early grade classrooms. This created a glaring need for intensive staff development — a need that current programs do not come close to meeting.

In recent years, new early childhood teachers have received six to ten hours of special training; an additional day and a half was added for those at the 99 lowest-performing schools. This staff development effort was based on a "turnkey" approach, and about half of the turnkey trainers were experienced teachers. During the session, this was a definite plus; but when these veterans returned to their own classrooms, they were generally unavailable to the new teachers with whom they had worked. And while the staff development sessions stressed small-group instruction, independent learning activities,' and a thematic approach to lesson planning, O.E.A. evaluators found that these strategies rarely translated into classroom activities.

O.E.A.'s findings suggest that we need to identify cadres of experienced, successful early childhood teachers, and find ways to extend their reach without diminishing their effectiveness in their own classrooms.

TRENDLINES—NYC

Profiling Our Youngest Students

O.E.A. has assembled a profile of the children who took part in early childhood programs during the past several years. The profile draws on information from evaluation reports, the citywide database, and findings of the Mayor's Early Childhood Education Commission (1986).

Four-year-olds:

- **Two-thirds of the City's four-year-olds belong to minority groups, and a quarter are economically disadvantaged.**
- **Many live in single-parent homes or have a working mother; however, two out of five are not enrolled in any kind of early childhood program.**

Language-minority children:

- **Each year, more than 15,000 of the children who enter our schools —about two out of five — do not speak English at home.**
- **The proportion of children who speak languages other than English at home grows each year.**
- **Although more than 20 percent of children entering all-day kindergarten had limited proficiency in English, all but 5 percent had acquired basic English-language skills by the end of grade 2, and no longer qualified for bilingual services.**

Mobility:

- **A third of 1985-86 second graders had already changed schools at least once during their brief school careers; this mobility is associated with poor achievement in both reading and mathematics.**
- **Of the children who entered all-day kindergarten in 1983-84, 17 percent had left the system before they finished grade 2.**
- **30 percent of 1985-86 second graders were new entrants, most of whom had no NYC kindergarten experience.**
- **Second graders who attended NYC kindergarten had much better reading and mathematics achievement than those who did not.**

Age:

- **By grade 3, one of five children is older than the expected age for grade.**
- **"Overage" children include mainly those who have been held over, and a small number of children who were overage at entry to the system.**

Sizing Up Our Classrooms

Reseachers have yet to reach consensus on optimal class size. However, research suggests that if children are to benefit from class-size reductions, there must be a corresponding shift to small-group and individual instruction. This finding links three major elements in early childhood education: class size, curriculum planning, and teacher training.

Reviewing the literature on class size, the Educational Research Service (ERS) found that in grades K through 3, "small" class size (meaning 22 children or less) is related to improved reading and mathematics achievement (1986). ERS also found that small class size enhances children's behavior and attitudes; bolsters achievement by students of lesser academic ability; strengthens achievement by economically-disadvantaged and ethnic-minority students; and boosts teacher morale.

Researchers draw a distinction between class size and the adult/child ratio, asserting that large classes impede young children's ability to learn, no matter how many adults are present. In New York City, not all of the 99 lowest-performing schools had enough available classrooms to cap first-grade class size at 15. This affected average class sizes and adult/child ratios: classes of up to 16 children were assigned one teacher; classes with 17 to 23 children were assigned one teacher and one paraprofessional; larger classes of up to 50 pupils were assigned two teachers. On the whole, the classes with a teacher and a paraprofessional performed best, while the double classes (particularly the bilingual) were least successful. (O.E.A. 1986e).

The Illinois State Board of Education conducted its own review of the literature, and concluded that, in general, the fewer children per adult, the more effective the program. Research suggests that an adult/child ratio of 1:15 or better through grade 3 may indeed help children sustain short-term gains, so that they can profit in later learning situations where less individual attention is available (Sava, 1985).

Parents as Partners

Unlike the highly charged issue of bilingual education, parent involvement in early childhood programs sparks little debate. Recent studies strongly indicate that parent involvement has a positive impact on children's cognitive development, reasoning skills, and academic achievement, and should be an important component of early childhood programs (Irvine, 1982). Schweinhart & Weikart (1986) urge that parents be treated as partners or colleagues in the educational process, and Hoegl (1985) found that participation makes parents more aware of their children's affective needs and cognitive development. In its report on Project Giant Step, the Mayor's Early Childhood Commission (1986) recommended extensive parent involvement in early childhood programs, with minimum standards built into program designs.

As more and more mothers of young children enter the work force, gauging the impact of parent involvement appears to be simpler than securing that involvement. O.E.A. survey data from parents of all-day kindergartners show a high level of interest in their children's early education, but little actual participation. Most parents reported that they visited the classroom during open-school week, attended parent-teacher conferences, and helped their children with schoolwork. But only one in five said that they had helped in the classroom or in the school. O.E.A. studies suggest that as schools develop strategies for involving parents in their programs, they need to pay particular attention to parents who are not fluent in English.

Getting Results

National studies, and our experience in New York City, show that early childhood programs offer substantial benefits when they are well-planned and carried out. By introducing major initiatives throughout the system, New York City has sought to boost children's chances for future success. We can point to encouraging data: children who attended all-day kindergarten have stronger readiness skills than children who attended half-day; children who enter school from homes where English is not spoken pass a basic English proficiency test by grade 2; and children who have been exposed to a full range of early-childhood initiatives show impressive gains in reading and mathematics.

At the same time, we have reason to be concerned about the quality of instruction day by day.

Researchers' insights into effective instructional strategies are wasted if they are not translated into classroom activities. The considerable resources required to trim class size are wasted if children do not receive more individual attention. Programs aimed at children with weak skills are wasted if they do not exploit the know-how of experienced teachers.

Decision-makers must be mindful of the full implications of new policies, and the extent to which those policies may strain the resources of district and school administrators. Administrators need technical assistance as they seek to implement policy and coordinate efforts. And teachers -- particularly newcomers to the field -- need highly focused professional development, appropriate curricula, and ongoing help in carrying out those curricula. These are the most important lessons of national research and of New York City's recent initiatives.

O.E.A.

REFERENCES

Chicago Panel on Public School Policy and Finance. (1987)
Bending the twig: The elementary and dropout rates in the Chicago public schools. Chicago, IL: Author.

Child Care Action Campaign. (1986)
Child care action campaign media kit. [Unpublished data, Bureau of Labor Statistics.] New York: Author.

Chorvinsky, M. (1982)
Preprimary enrollment 1980.
Washington, DC: National Center for Educational Statistics.

Consortium for Developmental Studies. (1983)
As the twig is bent . . . lasting effects of preschool programs. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cummins, J. (1981)
The role of primary language development in promoting educational success for language minority students: A theoretical framework. Los Angeles, CA: California State University, Dissemination and Assessment Center.

Dolson, D.P. (1985)
The application of immersion education in the United States. Rosslyn, VA: National Clearinghouse for Bilingual Education.

Early Childhood Education Commission. (1986)
Take a giant step: An equal start in education for all New York City four year olds. New York: Office of the Mayor.

Educational Research Service. (1986)
Class size research: A related cluster analysis for decision making. Arlington, VA: Author.

Elkind, D. (1986)
Formal education and early childhood education: An essential difference.
Phi Delta Kappa, 67, 631-636.

Hoegl, J. (1985)
The effectiveness of early childhood programs: A review of research.
Springfield, IL: Illinois State Board of Education, Department of Planning, Research and Evaluation. (ERIC Document Reproduction Service. No. ED 260 825).

Irvine, D.J. (1982)
Evaluation of the New York State experimental prekindergarten program. Final Report. Albany, NY: New York State Education Department. (ERIC Document Reproduction Service No. ED 219 123).

Lamme, L.L., McMillan, M.R., & Clark, B.H. (1983)
Early childhood teacher certification: A national survey. *Journal of Teacher Education, 34,* 44-47.

Logue, M. E., Eheart, B.K., & Leavitt, R.L. (1986)
Staff training: What difference does it make? *Young Children, 41,* 8-9.

Office of Educational Assessment, New York City Board of Education. (1986a)
All-day kindergarten program classroom implementation. New York: Author.

Office of Educational Assessment, New York City Board of Education. (1986b)
1985-86 second-grade class-size reduction program: Classroom implementation. New York: Author.

Office of Educational Assessment, New York City Board of Education. (1986c)
Research foundations for early childhood education in New York City.
New York: Author.

REFERENCES *Continued*

Office of Educational Assessment, New York City Board of Education. (1986d)
Longer-term effects of all-day kindergarten, 1985-86. New York: Author.

Office of Educational Assessment, New York City Board of Education. (1986e)
First-grade reduced class size to 15 program in 99 selected schools. New York: Author.

Sava, S.G. (1985)
Signs of life. *Young Children, 40,* 9-10.

Schweinhart, L.J. & Weikart, D.P. (1986)
What do we know so far? A review of the Head Start synthesis project. *Young Children, 41,* 49-55.

Spodek, B. (1982)
The kindergarten: A retrospective and contemporary view. In L.G. Katz (Ed.): *Current topics in early childhood education, Vol. 4.* Norwood, NJ: Ablex Publishing Corporation.

Travers, J., & Ruopp, R. (1978)
National Day Care Study: Preliminary findings and their implications. Cambridge, MA: Abt Associates, Inc.

HANDS ON

Planning Effective Programs

Recent research on early childhood education point to these strategies:

- **Phase in early childhood programs gradually, to allow curriculum planning and teacher training, and the allocation of classrooms and materials.**
- **Design curricula to meet children's needs and ensure continuity of instruction. Provide for a gradual transition from experiential activities to more structured, formal instruction.**
- **Emphasize oral-language development throughout the early childhood years.**
- **Limit classes to 22 pupils, and maximize small-group and individual instruction.**
- **Improve adult/child ratios by reducing class size, rather than forming double-sized classes with two teachers.**
- **Develop specialized training for early childhood educators, addressing major issues in developmental psychology. Teachers who work with language-minority students, and with low-performing children, need additional, focused training.**
- **Develop mechanisms to encourage consistent parent participation.**
- **When planning programs for language-minority children, allow for some use of the home language to ease the transition from home to school.**

Forthcoming

Future ***Research Briefs*** will focus on these topics:

- ***At-Risk Youth:***
  What programs and strategies have improved attendance and reduced dropout rates? At what grade level should efforts begin? What are the characteristics of an effective school serving at-risk youth?

- ***Staff Development:***
  How do we know that staff development has been effective? What are the advantages and disadvantages of central versus local staff development? What can be done to improve the retention of new teachers? How can the needs of experienced teachers for professional growth and new skills be addressed?

Now Available

Reseach Brief #1

"Relating Schools to the Workplace"

RESEARCH BRIEF #2

June, 1988

Series Editor
Jane Canner

Contributors
Carolyn Jarvis
Prudence Opperman
Betsy Taleporos

Editorial Consultant
Rima Shore

Designer
Jacqueline Wong Posner

Research Briefs
are prepared by the Office of Educational Assessment of the New York City Board of Education

Richard Guttenberg, Director

Please send comments or response to O.E.A., Room 507, 110 Livingston Street, Brooklyn, New York 11201